

**A MONOLITHIC SEMICONDUCTOR DEVICE FOR PREVENTING EXTERNAL
ACCESS TO AN ENCRYPTION KEY**

ABSTRACT OF THE DISCLOSURE

A monolithic semiconductor device having an encryption engine and encryption key
5 register to store one or more encryption keys, where the contents of the encryption key register
are observable, or can be made observable, only to internal components of the device is disclosed
herein. The encryption key register can be implemented as an integrated or non-integrated
volatile or non-volatile memory location. The monolithic semiconductor device can also include
10 means for temporarily externally accessing and/or defining the contents of the key register
during the manufacturing process and/or for a limited number of times after the manufacture
and/or testing of the monolithic semiconductor device is completed.